



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/051,774 | 01/16/2002 | Raymond T. Hsu | PA020106 | 1529 |

23696 7590 06/15/2004

Qualcomm Incorporated
Patents Department
5775 Morehouse Drive
San Diego, CA 92121-1714

| |
|----------|
| EXAMINER |
|----------|

ESCALANTE, OVIDIO

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2645

DATE MAILED: 06/15/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/051,774

Applicant(s)

HSU ET AL.

Examiner

Ovidio Escalante

Art Unit

2645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,8-10,13,15-19,22,23,27-31,34,35,37 and 38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,8-10,13,15-19,22,23,27-31,34,35,37 and 38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2645

DETAILED ACTION

1. This action is in response to applicant's amendment filed on April 22, 2004. **Claims 1-5,8-10,13,15-19,22-23,27-31-34-35,37-38** are now pending in the present application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 38 are rejected under 35 U.S.C. 102(e) as being anticipated by Hsu et al.

US Patent Pub. 2003/0054807.

Regarding claims 1 and 38, Hsu teaches in a wireless communication system and apparatus supporting a broadcast service, (paragraphs 13 and 71), a method and means for:

providing a BCMCS_ID to identify the broadcast service, wherein an IP multicast address and UDP port number are associated with said BCMCS_ID , (paragraph 60 and fig. 8; "RTP/UDP/IP");

sending the BCMCS_ID to a base station (fig. 4; paragraphs 49 and 60);

configuring a broadcast service parameters message at the base station that includes the BCMCS_ID , (paragraph 60);

transmitting the broadcast service parameters message to a mobile station (fig. 4; paragraph 60) and;

Art Unit: 2645

using the BCMCS_ID in the broadcast service parameters message at the mobile station to determine availability of the broadcast service in an adjacent sector, (paragraphs 83,89 and 93).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-3,5,15-17,19,27-29,31,37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato in view of Hsu et al. US Patent Pub. 2003/0054807.

Regarding claims 1 and 38, Sato teaches in a wireless communication system and apparatus supporting a broadcast service, (abstract; fig. 24), a method and means for:

providing a BCMCS_ID to identify the broadcast service, (fig. 25; page 38, line 17-page 39, line 2; [¶185, ¶186]), wherein an IP multicast address is associated with said BCMCS_ID , (fig. 25; page 38, line 24-page 39, line 2);

Art Unit: 2645

sending the BCMCS_ID to a base station (fig. 25; 110-1; page 38, lines 17-23; [¶185]);
configuring a broadcast service parameters message at the base station that includes the BCMCS_ID , (page 38, line 17-page 39, line 2; page 40, lines 25-page 41, line 5; [¶185, ¶186, ¶195]);
transmitting service parameters message to a mobile station (120), (page 32, line 24-page 33, line 1; page 38, line 17-page 39, line 2; page 40, line 25-page 41, line 5; [¶155, ¶185, ¶186, ¶197]); and
using the BCMCS_ID in the broadcast service parameters message at the mobile station to determine availability of the broadcast service in an adjacent sector, (page 29, lines 7-10; page 40, lines 25-page 41, line 5; [¶59, ¶197]).

While Sato teaches of providing a BCMCS_ID and wherein an IP multicast address is associated with the BCMCS_ID , Sato does not specifically teach of providing a UDP port number and associating the UDP port number with the BCMCS_ID . However, Sato suggests this since Sato teaches of using the Internet for transmitting the broadcast service information and it was well known in the art that UDP is used with the TCP/IP protocol for generating packets in the Internet system.

Nonetheless, in the same field of endeavor, Hsu teaches of a wireless communication system and apparatus supporting a broadcast service, (paragraphs 13 and 71) and providing a BCMCS_ID to identify the broadcast service, wherein an IP multicast address and UDP port number are associated with said BCMCS_ID , (paragraph 60 and fig. 8; "RTP/UDP/IP").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Sato by providing a UDP port number with the

Art Unit: 2645

BCMCS_ID so that the base station can receive the multi-broadcast server through the Internet and the multi-broadcast service traffic can be effectuated between the content server and the mobile user.

Regarding claim 2, Sato, as applied to claim 1, teaches wherein the broadcast service is transmitted by a content server, (page 24, lines 17-24; [¶112]).

Regarding claim 3, Sato, as applied to claim 2, teaches wherein the broadcast service has a service name (program title), (fig. 25).

Regarding claim 5,19 and 31, Sato, as applied to claims 3,16 and 28, teaches wherein the BCMCS_ID is a globally unique BCMCS_ID issued by a global issuer, (fig. 2; page 4, lines 13-26; [¶15]; servers 251,252,253 issue a unique service ID to other servers).

Regarding claim 15,27 and 37, Sato, as applied to claims 1,16 and 28, teaches wherein the BCMCS_ID is a dual BCMCS_ID comprising a global indicator to indicate uniqueness of the BCMCS_ID, (fig. 25; page 38, line 24-page 39, line 2; [¶186]).

Regarding claim 16, Sato teaches a base station (110-1) for use in a wireless communication system supporting a broadcast service, (abstract; fig. 24), wherein the base station is receiving a first broadcast service identified by a first BCMCS_ID , wherein an IP Multicast address is associated with said first BCMCS_ID , (fig. 25; page 38, line 24-page 39, line 2) and wherein the base station has a neighbor base station receiving a second broadcast service identified by a second BCMCS_ID , (fig. 24; page 40, lines 25-page 41, line 5; page 42, lines 22-page 43, line 1; [¶197, ¶206]), wherein an IP multicast address is associated with said second BCMCS_ID and wherein the base station is configured to implement a method comprising:

Art Unit: 2645

receiving the second BCMCS_ID that identifies the second broadcast service, (page 40, line 25-page 41, line 5; [¶197]);

configuring neighbor configuration data that relates to the second broadcast service, (page 40, line 25-page 41, line 5; page 42, lines 1-6; [¶197, ¶202]);

configuring a broadcast service parameters message that includes the second BCMCS_ID and the neighbor configuration data, (page 42, lines 22-page 43, line 20; [¶206-¶209]); and

transmitting the broadcast service parameters message to a mobile station currently receiving the first broadcast service, (page 32, line 24-page 33, line 1; page 40, line 25-page 41, line 5; page 42, line 22-page 43, line 1; [¶155, ¶197, ¶206]).

While Sato teaches of providing a BCMCS_ID and wherein an IP multicast address is associated with the BCMCS_ID, Sato does not specifically teach of providing a UDP port number and associating the UDP port number with the BCMCS_ID.

In the same field of endeavor, Hsu teaches of a wireless communication system and apparatus supporting a broadcast service, (paragraphs 13 and 71) and providing a BCMCS_ID to identify the broadcast service, wherein an IP multicast address and UDP port number are associated with said BCMCS_ID, (paragraph 60 and fig. 8; "RTP/UDP/IP").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Sato by providing a UDP port number with the BCMCS_ID so that the base station can receive the multi-broadcast server through the Internet and the multi-broadcast service traffic can be effectuated between the content server and the mobile user.

Art Unit: 2645

Regarding claims 17 and 29, Sato, as applied to claims 16 and 28, teaches wherein the first broadcast service and the second broadcast service are transmitted by content servers, (fig. 3; page 3, line 29-page 4, line 8; page 24, lines 17-24, [¶13, ¶112]).

Regarding claim 28, Sato teaches a mobile station (120) for use in a wireless communication system supporting a broadcast service, wherein the mobile station is in a first sector of a first base station approaching a second sector of a second base station, (page 40, line 25-page 41, line 5; page 42, line 22-page 43, line 1; [¶197, ¶206]) and wherein the mobile station is configured to implement a method comprising:

receiving a first broadcast service identified by a first BCMCS_ID from the first base station, (page 32, line 24-page 33, line 1; page 38, line 17-page 39, line 2; page 40, line 25-page 41, line 5; page 42, line 22-page 43, line 1, [¶155, ¶197, ¶206]), wherein an IP multicast address is associated with said first BCMCS_ID , (fig. 25; page 38, line 24-page 39, line 2);

receiving a broadcast service parameters message that includes a second BCMCS_ID and neighbor configuration data, wherein the second BCMCS_ID identifies a second broadcast service available in the second sector, (page 40, line 25-page 41, line 5; page 42, line 22-page 43, line 1; [¶197, ¶206]), wherein the IP multicast address is associated with the second BCMCS_ID , (fig. 25; page 38, line 24-page 39, line 2);

examining the neighbor configuration data that relates to the second broadcast service, (page 40, line 25-page 41, line 5; page 42, line 22-page 43, line 8; [¶197, ¶206-¶207]); and

determining, based on the neighbor configuration data, whether the first BCMCS_ID and the second BCMCS_ID identify the same broadcast content whereby reception of the broadcast

Art Unit: 2645

content is continued in the second sector, (page 40, line 25-page 41, line 5; page 42, line 22-page 43, line 20; [¶197, ¶206-¶209]).

While Sato teaches of providing a BCMCS_ID and wherein an IP multicast address is associated with the BCMCS_ID, Sato does not specifically teach of providing a UDP port number and associating the UDP port number with the BCMCS_ID.

In the same field of endeavor, Hsu teaches of a wireless communication system and apparatus supporting a broadcast service, (paragraphs 13 and 71) and providing a BCMCS_ID to identify the broadcast service, wherein an IP multicast address and UDP port number are associated with said BCMCS_ID, (paragraph 60 and fig. 8; "RTP/UDP/IP").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Sato by providing a UDP port number with the BCMCS_ID so that the base station can receive the multi-broadcast server through the Internet and the multi-broadcast service traffic can be effectuated between the content server and the mobile user.

7. Claims 4,8,9,10,13,18,22,23,30,34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato in view of Hsu and further in view of Chang et al. US Patent Pub. 2002/0102967.

Regarding claims 4,8,9,10-13,18,22-25,30,34 and 35, while Sato teaches of receiving by the content server a BCMCS_ID, Sato does not specifically teach of requesting by the content server the BCMCS_ID.

Art Unit: 2645

However, Sato suggests this since the mobile terminal is requesting content and the content server must be able to request information if the content server is able to retrieve and transmit the information to the mobile terminal.

Nonetheless, in the same field of endeavor, Chang teaches that it was well known in the art to request by a content server a BCMCS_ID from a global/local issuer, (fig. 2; paragraphs 10-13). Chang further teaches dynamically generating a BCMCS_ID and associating a lifetime value with the BCMCS_ID, (paragraphs 9 and 13).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Sato by requesting content from a global or local issuer and generating a BCMCS_ID as suggested by Chang so that the content server can request data based upon the mobile terminal's needs.

Response to Arguments

8. Applicant's arguments filed April 22, 2004 have been fully considered but they are not persuasive.

Applicants contend that Hsu fails to teach or suggest, "providing a BCMCS_ID to identify the broadcast service, wherein an IP multicast address and UDP port number are associated with said BCMCS_ID since there is no indication in Hsu that the "broadcast service parameter message" is used to identify a broadcast service." The Examiner respectfully disagrees.

As taught by Hsu in paragraphs 59 and 60, MBS traffic is sent from the service provider in which the MBS traffic includes a RTP/UDP/IP header, (fig. 4). As stated also in paragraph 13 of Hsu, Multicast and Broadcast services (MBS) is also referred to as Broadcast and Multicast

Art Unit: 2645

Services (BCMCS). Therefore, it is clear that at least paragraphs 59-60 and fig. 4, teaches providing a BCMCS_ID service and wherein an IP multicast address and UDP port number are associated with the BCMCS, ("IP multicast address and UDP port number are associated with said BCMCS_ID"). Furthermore, as further explained below, the MBS ID identifies a broadcast service since the MBS comprises a broadcast service message.

As shown in paragraphs 20-22, the broadcast service parameter message (BCMCS_ID) has multiple fields which includes a common service parameter and a transport channel-specific parameter. The common service parameter includes parameters that identify at least the BCMCS service and information on what channels the MBS will be communicating, ("providing a BCMCS_ID to identify the service"). Therefore, the broadcast service parameter message of Hsu identifies the service.

Therefore, the Examiner believes and maintains that Hsu teaches of providing a BCMCS_ID to identify the broadcast service, wherein an IP multicast address and UDP port number are associated with said BCMCS_ID.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2645

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any response to this action should be mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

or faxed to:

(703) 872-9306, (for formal communications intended for entry)

Or:

(703) 872-9306, (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal
Drive, Arlington, VA, Sixth Floor (Receptionist).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ovidio Escalante whose telephone number is 703-308-6262. The examiner can normally be reached on M-F (6:30AM - 5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan S Tsang can be reached on 703-305-4895. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2645

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ovidio Escalante
Examiner
Group 2645
June 8, 2004

FAN TSANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

